TITLE

OLEFIN POLYMERS AND PROCESSES THEREFOR Abstract of the Disclosure

- Disclosed herein are processes for polymerizing ethylene, acyclic olefins, and/or selected cyclic olefins, and optionally selected olefinic esters or carboxylic acids, and other monomers. The polymerizations are catalyzed by selected transition metal compounds, and sometimes other co-catalysts.
- Since some of the polymerizations exhibit some characteristics of living polymerizations, block copolymers can be readily made. Many of the polymers produced are often novel, particularly in regard to their microstructure, which gives some of them unusual
- 15 properties. Numerous novel catalysts are disclosed, as well as some novel processes for making them. The polymers made are useful as elastomers, molding resins, in adhesives, etc. Also described herein is the synthesis of linear α -olefins by the oligomerization of 20 ethylene using as a catalyst system a combination a
- 20 ethylene using as a catalyst system a combination a nickel compound having a selected α-diimine ligand and a selected Lewis or Bronsted acid, or by contacting selected α-diimine nickel complexes with ethylene.